



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029**

January 7, 2013

Mr. John Simkins  
Planning and Environment Team Leader  
Federal Highway Administration  
Virginia Division  
P.O. Box 10249  
Richmond, Virginia 23240

Re: Draft Environmental Impact Statement for Interstate 64 Peninsula Study From  
Interstate 95 in the City of Richmond to Interstate 664 in the City of Hampton, Virginia,  
October 2012, CEQ 20120349

Mr. Simkins,

In accordance with the National Environmental Policy Act of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1509), the U.S. Environmental Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the above mentioned study. The Virginia Department of Transportation (VDOT), in cooperation with Federal Highway Administration (FHWA), is evaluating options to improve the 75 mile long I-64 corridor from the Interstate 95 (I-95) (Exit 190) interchange in the City of Richmond to the Interstate 664 (I-664) (Exit 264) interchange in the City of Hampton. The study area is located within seven localities, including the City of Richmond, Henrico County, New Kent County, James City County, York County, the City of Newport News, and the City of Hampton. The I-64 corridor includes 25 interchanges and 109 major bridge structures on or over the interstate.

The number of lanes on existing I-64 varies throughout the study area. In the vicinity of Richmond, from Exit 190 to Exit 197, there are generally three lanes in each direction. Between Exit 197 and mile marker 254, there are generally two lanes in each direction. Beginning at mile marker 254 and continuing east to the City of Hampton area, I-64 widens to four lanes in each direction with three general purpose lanes and one 2+ person High Occupancy Vehicle (HOV 2+) lane during the AM and PM peak periods. The DEIS studied the need to increase capacity, eliminating roadway deficiencies, and improving safety while attaining a Level of Service (LOS) of "C" or better in for modeled traffic of 2040.

The study is considering 5 basic alternatives (generally grouped as three) for meeting the stated purpose and need. Alternative 1A & 1B add general purpose lanes in the existing right-of-way (ROW) to the greatest extent practicable to either the outside of the existing lanes (1A) or to

the inside (1B) of the existing lanes in the median. Alternative 2A & 2B are adding lanes in existing right of way to the greatest extent practicable to either the outside of the existing lanes (2A) or to the inside (2B) of the existing lanes in the median, which are identical to 1A & 1B, and tolling all lanes. Alternative 3 is the addition of managed lanes located within the median of the existing lanes where space is sufficient and will expand the general use lanes when necessary. The projected costs for the alternatives are generally similar ranging from a low and high estimate for each at approximately \$4.7 - \$7.3 billion.

EPA reminds the lead agencies that avoidance and minimization to Waters of the U.S. (WOUS) to the greatest extent practicable must occur prior to any conversation of mitigation for impacts to WOUS. While the preferred alternative has not been identified nor final design and resulting potential impacts have not submitted for a CWA 404 permit, the document is focused heavily on mitigation and little to no discussion on avoidance and minimization. A total of 99.93 acres of wetlands and 148,493 linear feet of potentially jurisdictional waters were identified within the study corridor. A substantial and very similar amount of potential impacts WOUS are associated with these alternatives. Alternative 1A & 2A could impact 66.11 acres of wetlands and 112,237 linear feet of stream channel. Alternative 1B & 2B could impact 64.95 acres of wetlands and 113,544 linear feet of stream channel. Alternative 3 could impact 66.73 acres of wetlands and 112,516 linear feet of stream channel. As the project moves toward a design phase, effort will be needed to identify functions and values of resources in the study area. It is anticipated that effort will be made to bridge as great a portion of the aquatic resources as possible during the design phase of the project.

Based on our review of the DEIS, EPA has rated the environmental impacts associated with all of the action alternatives as Environmental Concerns ("EC") and the adequacy of the impact statement as "2" (Insufficient Information). This rating is due to the direct impacts of the proposed alternatives on aquatic resources, including streams, wetlands and floodplains, and terrestrial resources, including parkland. Environmental Justice (EJ) methodology for identifying communities of concern should be reviewed; other suggestions for EJ analysis are attached. Detailed comments on the DEIS are enclosed with this letter. A description of our rating system can be found at: [www.epa.gov/compliance/nepa/comments/ratings.html](http://www.epa.gov/compliance/nepa/comments/ratings.html).

Please consider the issues, questions and comments included in this letter and enclosure. EPA would appreciate the opportunity to discuss the comments provided here in. Thank you for the opportunity to review and comment on the DEIS for I-64; EPA looks forward to continued work with VDOT on this project. If you have any questions or comments regarding this letter please feel free to contact Mr. Mark Douglas at 215-814-2767 or [douglas.mark@epa.gov](mailto:douglas.mark@epa.gov).

Sincerely,



Barbara Rudnick  
NEPA Team Leader

Enclosure

## **Technical Comments**

### **Purpose and Need (P&N)**

While the traffic is reported to slow at various interchanges, the current status of congestion and the statements that the congestion will continue to increase due to additional traffic in the future does not necessarily justify the entire project as presented in the DEIS P&N as shown in Figure 3A & 3B. For example, the respective 2009 and 2010 reported average speed through the interchange of I-95/I-64 was 5 and 7 miles per hour slower than free flowing speed (of 55 mph) at peak travel times. This suggests the need for the expansion should be limited to the urban areas or simply stretches of roadway that is in need of improvement. It might be useful to identify and prioritize areas where improvements are imperative, and identify any area where less effort may be needed, to determine if impacts are reduced by tailoring improvements.

The Constrained Long Range Plans listed in the traffic model used to determine traffic demand for 2040 does not include the Hampton Roads Bridge-Tunnel nor Patriots Crossing (also known as the Third Crossing). As these projects tie into the DEIS and are currently in the NEPA and permitting process, the projects should be included in the overall traffic model analysis. These projects do not have independent utility and cannot be analyzed separate from one another. Of note, the proposed US Route 460 toll road is currently in the NEPA process and is factored into the traffic model.

### **Traffic and Transportation**

As presented in both the P&N chapter and Traffic and Transportation, it is unclear whether or not the new roadway plan will specifically address all deficiencies, or if the deficiencies can be corrected to current design specifications. The P&N states that there are 12 structures that cross over I-64 that do not meet current vertical clearances. Are these to be corrected as part of the expansion?

What is the projected reduction in traffic for tolling alternatives as a result of use of alternative routes (avoidance of the roadway)? What is the expected impact to the alternative parallel roadways to I-64 if tolling is put into effect? It's stated that US Route 60 could have an increase of 0-33% if I-64 is tolled. The DEIS does not provide adequate analysis of this or the impact of potential more efficient roadways and intersections will have once the increased traffic exits I-64 and travels on the ancillary roadways.

### **Alternatives Development**

What is the justification of Level of Service (LOS) "C" the required minimum for all sections of the of the I-64 corridor as modeled for 2040 traffic? Is this LOS too restrictive to fully evaluate all practicable alternatives if this project moves forward to the permitting phase? A LOS of "C" may not be the Least Environmentally Damaging Practicable Alternative (LEDPA) that the Corps is required to reach in light of the overall purpose and need during the permitting process. What would the overall impacts to WOUS if the design was at LOS "D"?

EPA suggests the proponents further examine the Transportation Systems Management/Travel Demand Management (TSM/TDM) as a viable alternative. As stated in the document the TSM/TDM was not evaluated with 'major' improvements to the infrastructure. EPA suggests the TSM/TDM be reevaluated with major improvements to the infrastructure thereby addressing the geometric deficiencies impacting capacity and safety issues at interchanges. Without a fully vetted alternatives analysis such as this example which would presumably impact much less right of ways and WOUS, it will be difficult to identify the LEDPA.

EPA suggests study include within the alternatives analysis the phasing of the proposed alternatives. This phasing concept would be applied as presumably the roadway would not be expanded for all 75 miles at the same time of construction. It would be appropriate for the document to foresee how the project will proceed and if further NEPA documentation is expected to provide more detail on areas of concern.

EPA suggest the alternatives also include analyzing the segmenting the proposed expansion to into three sections (metro Richmond, rural, and metro Hampton) to determine if the sections could meet independent utility. Similarly EPA suggests the study include the analysis of focusing on roadway improvements to intersections for 'major' improvements that would reduce the highest congestion as modeled for 2040 traffic? This could allow for the most congested intersections to be systematically addressed while meeting the purpose and need on a smaller scale as opposed to the entire 75 mile roadway at once.

EPA suggests the lead agencies consider further evaluation of the potential for intermodal transportation along both rail line corridors. While the stated projected passenger ridership would be negligible at 0.7% to 2.3% reduction of vehicles at modeled 2025 traffic, the 2040 anticipated reduction was not provided or not projected and could be higher. Considering the passenger ridership at 2040 levels in combination with TSM/TDM (including interchange improvements) the overall LOS could improve with less WOUS and right of way impacts.

Alternative 1A & 1B (general lanes added) and 2A & 2B (tolling lanes added) are identical at this stage in terms of design and potential impacts. What would the potential impacts be once the tolling booths were incorporated into the design and layout of interchanges if in fact the proposed project were to be a tolled roadway?

### **Natural Resource and Impacts**

An official jurisdictional determination has not been issued at time of publication of this DEIS. As reported in the DEIS a total of 99.93 acres of wetlands and 148,493 linear feet of WOUS were identified within the study corridor including 70.40 acres of non-tidal and 29.53 acres of tidal wetlands and 4,467 linear feet of tidal stream channel. The remaining 144,026 linear feet of stream channel includes 127,563 perennial, 12,490 intermittent, and 3,800 ephemeral channel were identified. Additionally, 173 linear feet of lacustrine resources were identified.

If the proposed project proceeds to the permitting process as one of the alternatives with the scope and scale of impacts, it would be assumed the mitigation required would be met through

the use of banks. If banks are used, EPA suggests the mitigation sites used by the banks be within same HUC 12 or higher and located on the peninsula that I-64 is located. This will eliminate the chance for credits to be purchased for the use of off-setting the impacts to the expansion outside of the impacted area while still being located within a larger watershed. The vast amount of impacts to WOUS and developmental may lead to a situation where it may become difficult to eventually mitigate for the impacts.

Without knowing the preferred alternative or design details, it is difficult to offer more than generic avoidance and minimization comments at this time. Similarly without knowing additional details than what is offered in this section of the DEIS, it is difficult to offer substantive comments on the quality of wetlands and streams other than the overall amount of impacts to WOUS is seemingly large even for the length of the roadway. EPA reserves the right to provide substantive comments upon receipt of further information.

It is understood that the roadway is in the watershed and/or crosses reservoirs used for public water supply. When more detailed information is developed, it will be necessary to look at alternatives to minimize risk of impacting water supply. Designs should be considered to minimize uncontrolled runoff in the watershed, minimize risk of a release of contaminants from the highway, etc.

The document should further evaluate the potential impacts to already impaired watersheds as listed in Table 16 within the technical memorandum on a watershed by watershed analysis. The current information provided appears to be dismissive of the need to further evaluate the scale and scope of the expansion will have on water quality. This is especially important that the study evaluate the potential of the subwatersheds as well as the Chesapeake Bay as a whole including the newly issued TMDL.

The EIS states that during construction, the applicable regulations for stormwater will be followed, but does not address how the proposed project will potentially affect the already impaired watersheds with the increased surface disturbance, filling of wetlands, increased impermeable surfaces, impacts from stream crossings, runoff, and potential pollutants from the roadway once the roadway is in use. EPA suggests the EIS discuss what efforts will be employed to avoid further impairment of the waterways and if need be, consider an alternates to avoid the impacts.

The EIS acknowledges the development of the Chesapeake Bay TMDL; the EIS does not discuss or demonstrate how the proposed project will meet the TMDL allocations, offset any new or increased discharges or loads, or limit additional impairment of the waterbodies as a result of the impacts associated with the construction of the roadway and additional SW runoff after construction. The Chesapeake Bay Program Watershed Model could support a general analysis of the potential increase in nitrogen, phosphorus and sediment delivered to the Chesapeake Bay resulting from an additional 75 miles of impermeable surface at these county and river segment scales.

EPA suggest the study go into detail concerning the avoidance of impacting WOUS by continued and future bridging of jurisdictional features. This would include the expansion of bridges,

conversation of culverts to bridging, and all practicable measures to avoid placing fill in WOUS while still meeting the purpose and need of the project.

Federal agencies are also required to address issues raised in EO13508 "Protecting and Restoring the Chesapeake Bay Watershed" which includes restoring wetlands, streams, and riparian forest buffers, in addition to reducing nitrogen, phosphorous, sediment and toxic contaminants to meet water quality goals.

### **Secondary and Cumulative Effects**

The DEIS compiles reasonably foreseeable projects in the study area. It would be useful to try to express the quantity of resources that have been lost or degraded from the baseline to the present, and an estimate of potential impacts of future projects. Though it is understood that new growth will be done within the laws protecting natural resources, it has been historically true that resources have been degraded by development. This information can be used to identify resources that have been compromised by past activities, and may help target restoration and mitigation strategies.

### **Stormwater Management**

The DEIS provides a brief construction history of I-64 in the project study area. The existing highway was constructed in the early sixties with various upgrades occurring between 1979 and 2006. During that period, and continued to the present, significant advancements in stormwater control measures have occurred. While some stormwater management practices may have been implemented as part of the upgrades, prior to 1980 there was very little stormwater management practices implemented for highway projects other than simply conveying runoff off the highway. Within the DEIS there are a number of sections that discuss stormwater management measures to be implemented for new impervious areas associated with the highway construction. In many of these sections, the stormwater management measures being proposed would be for improvements to the existing stormwater management system. Stormwater runoff is a leading cause of surface water impairment in Virginia. A number of watersheds within the project study area are impaired and require total daily maximum load (TMDL) planning and implementation.

EPA is asking for additional clarification and detail on the stormwater improvements, potential types of systems and proposed locations, to upgrade systems from simple runoff conveyance. Please note that any stormwater management considered should not be placed in WOUS. EPA suggests that VDOT also consider stormwater practices that include measures to control runoff not just from new impervious areas but for existing pervious areas as well. EPA believes there are a number of stormwater retrofits that would promote opportunities for TMDL reduction that could improve water quality and quantity.

### **Endangered Species/Invasive Species**

There is need to coordinate with State and Federal agencies (especially Fish and Wildlife Service (FWS)). It is stated that response was not received from some agencies; this information is

needed in the document. Coordination should be updated during the project to account for changes in the listing over time.

It is not clear how valuable the survey done for the small whorled pagonia (page 42) is. There is need to coordinate with agencies and have appropriate people do all surveys and make determinations. Please coordinate with FWS. Please be aware if SAV is identified, that protection of the resource is a priority, as it is considered of special importance.

Please include any necessary steps to comply with Migratory Birds and bird protection; for instance, should there be seasonal moratoriums to avoid nesting.

Please state how the project will comply with EO 13112 on invasive species.

### **Environmental Justice**

The methodology used to identify minority populations may be too conservative. CEQ's definition of minority population states that: 1) the minority population of an affected area exceeds 50 percent; or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate geographic analysis. In addition, a minority population also exists if there is more than one minority group present and the minority percentage, when calculated by aggregating all minority persons, meets one of the above thresholds. It may be appropriate to use the state average for minority populations as an additional benchmark for identifying census block groups with significant percentages of minority populations. The state of Virginia has a minority population of around 29%, therefore the 50% threshold used in this document seems high. All of the counties and cities identified in this document have minority populations that make up less than 50% of the population except the City of Richmond whose minority population is right around 50%. In reviewing the demographic data available for the state of Virginia, it seems reasonable to choose benchmarks that are more reflective of those counties and cities whose populations of minorities is far less than 50%.

It would be most helpful to see the percent minority populations by block group for all of the block groups in the study area. Table III. A. 3 should be revised to provide all of this information.

Environmental Justice refers to minority populations and low income populations. See Executive Order 12898. Data shows that 10.7 % of the people in Virginia live below the poverty level. What about the study area? The median household income in Virginia from 2007-2011 was \$63,302. The median household income for Block Group 304.1 in Richmond was \$7,220. What is the rationale for the benchmark of \$17,050? It seems that there is a need for a more careful examination of the economic status of the block groups. Information available to this reviewer seems to show that a large number of the block groups have populations that may be considered as low income populations. Were all of the block groups in the study area analyzed? If so, where is that information?

There needs to be a clearly defined list of all of the block groups that are considered to be areas of potential Environmental Justice concern. How many of the block groups exceed both the minority and low income benchmarks?

Why are the areas of potential Environmental Justice concern not displayed on the maps?

If we are to address Environmental Justice, we must be able to accurately identify the areas of potential Environmental Justice concern, be able to identify the impacts and benefits that might impact those populations of concern, assess and evaluate those impacts upon minority and low income populations, and determine if those impact will have an adverse or disproportionate impact upon those populations. There does not seem to be enough information made available that looks at what those impacts might be on minority and low income populations located in the areas of potential Environmental Justice concern. First of all this reviewer is not certain that all areas of potential Environmental Justice concern have been identified. It is also not certain that assessments have been done to examine the localities of the various impacts that may be localized in or near the areas of potential Environmental Justice concern. For example, has the impact of the tolls on the highway been taken into consideration for those low income residents that will need to commute to work? Will they take other routes to work to avoid the tolls? Can they afford daily tolls? Will there be construction activities that will impact block groups of minority residents? How many property acquisitions will take place in minority and low income block groups? Will there be localized noise or fugitive dusts from construction impacting minority and low income block groups? Just where is the work taking place with respect to populations of Environmental Justice concern.

It would be most helpful to have a table listing all of the areas of EJ concern. This list should contain all of those areas designated through assessment of either minority populations or low income populations.

Justifications given for why areas of potential EJ concern will not be disproportionately impacted do not provide nearly enough information to support that claim. The explanations are limited and so are the analyses.